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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,896	08/06/2003	Bong Hoe Kim	P-0572	7349
34610	7590	08/22/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			AFSHAR, KAMRAN	
			ART UNIT	PAPER NUMBER
			2681	

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/634,896

Applicant(s)

KIM, BONG HOE

Examiner

Kamran Afshar, 571-272-7796

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/23/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11, 18-30, 42-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Song (U.S. pub. No.: 2001/0008523 A1) in view of Miya (U.S. Pub. No.: 2003/0171118 A1).

With respect to claims 1, 18, 25, 42 Song discloses a cell ID code generating method in a radio communication system (See e.g. Title, Abstract, generating identification codes, bi-orthogonal codes, hadamard codes, Page 1, ¶ [0005] & Page 3, ¶ [0031]) inherently receiving candidate codes (See e.g. temporary identification codes,) a cell ID code from a (See e.g. are inherently included in RAN, UTRAN); selecting one candidate code on the basis of power (See e.g. Page 3, ¶ [0036]) and / or measuring power of each common pilot (See e.g. Page 1, ¶ [0005]); and puncturing the selected candidate code ( to generate a primary cell ID code (See e.g. deleting or puncturing Page 3, ¶ [0032]) and / or selecting one temporary cell ID code assigned to a cell with the strongest CPICH power among temporary cell ID codes (See e.g. ¶ [0059]). In an analogous field of endeavor, Miya discloses the control center, which is vigorously known in the art as a radio network controller (RNC) and the common pilot channel (CPICH) (See e.g. Page 1, ¶ [00011], Page 6, ¶ [0095]). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to provide above teaching of Miya to Song providing a radio network controller (RNC) and the common pilot channel (CPICH) so that the RNC centrally controls the base stations (or cell sites), improves overall system capacity; and the feedback information of more than one cell or base station of the active set via CPICH and FBI under SSDT.

Regarding claim 2, Miya discloses the control center is a radio network controller (See e.g. Page 1, ¶ [00011], RNC of Fig. 2).

Regarding claim 3, Song discloses the candidate code is a temporary cell ID code (See e.g. Page 4, ¶ [0053]).

Regarding claims 4, 19, 26, Song discloses the temporary cell ID code is 8 Hadamard codes with a 16-bit length (See e.g. Page 5, ¶ [0060]).

Regarding claims 5, 20, 27, Song discloses the puncturing is performed in such a manner that the Hamming distance is not reduced (See e.g. Page 8, ¶ [0096]).

Regarding claims 6, 21, 28, Song discloses two '0' bits are punctured in the candidate code (See e.g. first and the ninth bit, Page 8, ¶ [0091], ¶ [0092], Table 17).

Regarding claims 7, 22, 29, Song discloses the two zero bits are the first and the ninth bits of the 16-bit candidate code (See e.g. first and the ninth bit, Page 8, ¶ [0091], ¶ [0092], Table 17).

Regarding claim 8, Song discloses the two zero bits are the first and the ninth bits of the 16-bit candidate code.

Regarding claims 9, 23, 30 Song discloses checking whether the temporary cell ID codes are long; checking whether link feedback information (FBI) bits are 2 bits (See e.g. Page 9, ¶ [0102]), if the temporary cell ID codes are long, puncturing the temporary cell ID codes if the FBI bits are 2 bits (See e.g. Page 9, ¶ [0103], Page 10, ¶ [0107], Table 18) and / or recognizing a cell with the strongest power (i.e. CPICH) (See e.g. ¶ [0059]).

Regarding claim 10, Song discloses generating the temporary cell ID codes as the first long code of 16 bits; and puncturing the first and ninth bits of the temporary cell ID codes to generate a second long code of 14 bits (See e.g. Page 9, ¶ [0103]).

Regarding claim 11, Song discloses transferring the generated primary cell ID code to cells through an uplink FBI field (See e.g. Page 3, ¶ [0021]).

Regarding claim 24, Song discloses assigning the temporary cell ID code as a first long code for the FBI field; and puncturing the first and ninth bits of the temporary cell ID code and assigning a second long code for the FBI field (See e.g. Page 9, ¶ [0103]).

Regarding claim 43, Song discloses the terminal and cells inherently include a temporary cell ID code table (See e.g. Page 2, Tables 3-4).

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Regarding claim 44, Song discloses the temporary cell ID code and the primary cell ID code are transmitted and received by index (See e.g. identity or ID, binary bit sequence, etc, Pag2, ¶ [0014] & Page2 Tables 3-4).

Regarding claim 45, Song discloses the terminal transfers the primary cell ID code to every cell (See e.g. Pag2, ¶ [0014] & Page2 Tables 3-4).

Regarding claim 46, Song discloses the temporary cell ID code is a punctured Hadamard code (See e.g. Page 2, ¶ [0016]- ¶ [0017]).

Regarding claim 47, Song discloses the punctured Hadamard code is a 16-bit Hadamard code with first and ninth bits punctured (See e.g. Page 9, ¶ [0103]).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 12-17, 31-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Song (U.S. pub. No.: 2001/0008523 A1).

With respect to claims 12, 15, Song discloses a cell ID code generating method in a radio system (See e.g. mobile communication system, UTRAN, wireless system, etc.) in which a primary cell is recognized by receiving a primary cell ID code from a terminal (UE) and / or to a cell (See e.g. Title, Abstract, generating identification codes, primary or temporary cell ID code), receiving a temporary cell ID code from a radio network; and puncturing a specific bit of the temporary cell ID code in a manner that a minimum Hamming distance is not reduced, to generate a primary cell ID code (See e.g. Page 1, ¶ [0011] – Page 2, ¶ [0014], Page 9, ¶ [0096]).

Regarding claims 13,16, Song discloses the temporary cell ID code is 8 Hadamard codes (See e.g. Page 5, ¶ [0060]).

Regarding claims 14, 17, Song discloses the specific bit is the first and ninth bits of the Hadamard codes with the 16-bit length (See e.g. first and the ninth bit, Page 8, ¶ [0091], ¶ [0092], Table 17).

With respect to claim 31, Song discloses a cell ID code generating method in a wireless system (See e.g. mobile communication system, UTRAN, wireless system, etc.) in which a terminal (See e.g. UE, Cell) receives temporary cell ID codes of each cell from a network and transfers a primary cell ID code to an active cell (See e.g. identifier, identification codes, primary or temporary cell ID code, Page 1, ¶ [011][0012]), wherein the temporary cell ID code and the primary cell ID code are transmitted and received by index (See e.g. identifier, identification codes, primary or temporary cell ID code, identity or ID, binary bit sequence, etc. Page 2, ¶ [0014] & Page 2 & Tables 3-4).

Regarding claims 32, 39, Song discloses the terminal and cells inherently include a temporary cell ID code table (See e.g. Page 2, Tables 3-4).

Regarding claims 33, 40, Song discloses the temporary cell ID code is a punctured Hadamard code (See e.g. Page 2, ¶ [0016]- ¶ [0017]).

Regarding claims 34, 41 Song discloses the punctured Hadamard code is a 16-bit Hadamard code with first and ninth bits punctured (See e.g. first and the ninth bit, Page 8, ¶ [0091], ¶ [0092], Table 17).

Regarding claim 35, Song discloses the network transfers (See e.g. UTRAN) an index corresponding to a temporary cell ID code of each cell to each cell and the terminal (See e.g. Page 2, ¶ [0014]).

Regarding claim 36, Song discloses the terminal transfers an index of a temporary cell ID code corresponding to a primary cell ID code to every terminal (See e.g. Page 2, ¶ [0014]).

With respect to claim 37, Song discloses a cell ID code identifying method in a wireless system in which a primary cell ID code is received from a terminal and a primary cell is identified (See e.g. mobile communication system, UTRAN, wireless system, etc.), assigning a temporary cell ID code of each cell by a network; transmitting, in each cell, the allocated temporary cell ID code to a terminal (See e.g. identifier, identification codes, primary or temporary cell ID code, Page 1, ¶ [0011]- ¶ [0012]); receiving a primary cell ID code from the terminal; and identifying a primary cell by comparing the primary cell ID

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code with its temporary cell ID code (See e.g. identity or ID, binary bit sequence, etc, Pag2, ¶ [0014] & Page2 Tables 3-4).

Regarding claim 38, Song discloses the temporary cell ID code and the primary cell ID code are transmitted and received by index (See e.g. identity or ID, binary bit sequence, etc, Pag2, ¶ [0014] & Page2 Tables 3-4).

### **Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Willars (U.S. Pub. No.: 2003/0013443 A1), which discloses Handover In A Radio Access Network Environment Using Subscriber-Dependent Neighbor Cell List.

b) Vadgama (U.S. Pub. No.: 2003/0013443 A1), which discloses cell Selection.

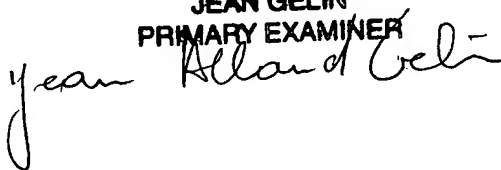
Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (571) 272-7796. The examiner can be reached on Monday-Friday.

If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, Feild, Joseph can be reached @ (571) 272-4090. The fax number for the organization where this application or proceeding is assigned is **571-273-8300** for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kamran Afshar

JEAN GELIN  
PRIMARY EXAMINER

 8/15/05